TOSHIBA TRANSISTOR SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

2 S A 1 2 2 5

POWER AMPLIFIER APPLICATIONS
DRIVER STAGE AMPLIFIER APPLICATIONS

- High Transition Frequency : $f_T = 100 \text{ MHz}$ (Typ.)
- Complementary to 2SC2983

MAXIMUM RATINGS (Tc = 25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT	
Collector-Base Voltage		v_{CBO}	-160	V	
Collector-Emitter Voltage		V_{CEO}	-160	V	
Emitter-Base Voltage		$ m V_{EBO}$	- 5	V	
Collector Current		${ m I}_{ m C}$	-1.5	A	
Base Current		$I_{\mathbf{B}}$	0.3	Α	
Collector Power	$\Gamma a = 25^{\circ}C$	D.	1.0	w	
Dissipation	$\Gamma_{\rm c} = 25^{\circ}{\rm C}$	PC	15] **	
Junction Temperature		$\mathrm{T_{j}}$	150	°C	
Storage Temperature Range		$\mathrm{T_{stg}}$	-55~150	°C	

(A)

6.8MAX

5.2±0.2

0.6±0.15

0.95MAX.

(B)

6.8MAX.

1.2 3 2.3

0.6±0.15

0.95MAX.

1. BASE

1. BASE

2. COLLECTOR

(HEAT SINK)

3. EMITTER

JEDEC

JEITA

TOSHIBA (A) 2-7B1A (B) 2-7B2A

Weight: 0.36 g (Typ.)

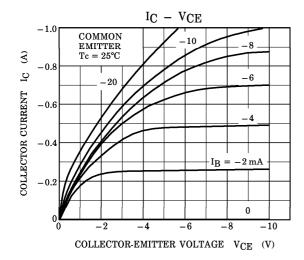
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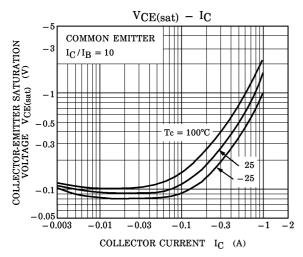
ELECTRICAL CHARACTERISTICS ($Tc = 25^{\circ}C$)

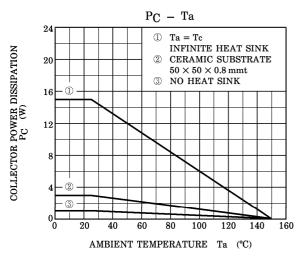
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = -160 V, I_{E} = 0$	_	_	-1.0	μ A
Emitter Cut-off Current	$I_{ m EBO}$	$V_{EB} = -5 V, I_{C} = 0$	_	_	-1.0	μ A
Collector-Emitter Breakdown Voltage	V (BR) CEO	$I_{\mathrm{C}} = -10 \mathrm{mA}, I_{\mathrm{B}} = 0$	-160	_	_	V
Emitter-Base Breakdown Voltage	V (BR) EBO	$I_{\mathrm{E}}=-1\mathrm{mA},\ I_{\mathrm{C}}=0$	-5	_	_	v
DC Current Gain	hFE (Note)	$V_{ m CE} = -5 m V, I_{ m C} = -100 m mA$	70	_	240	
Collector Emitter Saturation Voltage	V _{CE} (sat)	$I_{\rm C} = -500 {\rm mA}, I_{\rm B} = -50 {\rm mA}$	_	_	-1.5	V
Base-Emitter Voltage	$ m V_{BE}$	$V_{CE} = -5 V, I_{C} = -500 mA$	_	_	-1.0	V
Transition Frequency	$ m f_{T}$	$V_{CE} = -10 \text{ V}, I_{C} = -100 \text{ mA}$	_	100	_	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -10 \text{ V}, I_{E} = 0,$ f = 1 MHz	_	30	_	рF

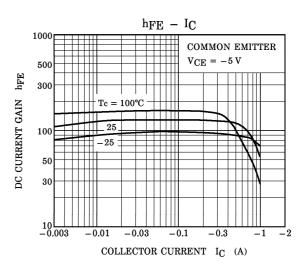
Note : hFE Classification $O:70\sim140$, $Y:120\sim240$

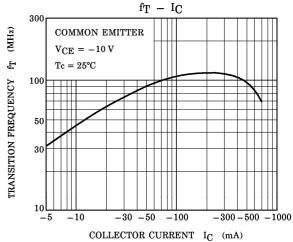
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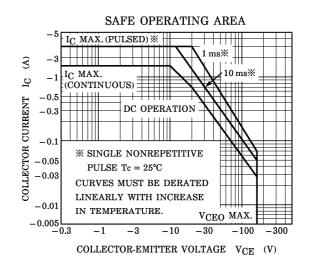












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